OIB Antarctic Flight 16, Pine Island Glacier 3

Aircraft	DC-8
Flight Number	DC8-100124
Flt Req #	108002
Flight Hours	11.0
Date	11/7/09
Purpose of Flight	ICE Bridge-Pine Island Glacier – 3
Aircraft Status	Airworthy
Sensor Status	All installed sensors operational.
Significant Issues	None
Accomplishments	Low level gravity survey over Pine Island Glacier. Two grids with long axis at right angles were flown with ATM coupled guidance. DACOM reported normal operations. Ku/ Snow Radars and MCoRDS reported five hours of good data acquisition with signatures typical of mostly snow coverd land ice. Mission Science expressed satisfactory results were achieved. LVIS was not staffed for this flight.
Planned events	Planning for Pen-3 tomorrow

Flight Summary

PIG 3, FLT 16

November 7, 2009

Bill Krabill (Mission Principal Investigator):

November 7, 2009

DC8 mission # 16 to Antarctica

Flight Plan id: PIG-3

Once again, our thanks to the on-site CECS personnel for providing clear and understandable translation of the local weather office detailed forecast.

take-off 1330z

Today's survey starts and ends with gravity/laser/IPR surveys over the Abbot Ice Shelf.

This flight surveyed a series of parallel lines optimized for gravimetry over the Pine Island Glacier lower area.. The mission was flown in very clear conditions. We may have lost 5 minutes of data at the end of the first Abbot line from a combination of ice fog, and turbulence kicking off the autopilot. But after that we surveyed for more than 5 hours with all remote sensors getting 100% coverage. So half of the detailed survey of PIG is in the can.

Plan for tomorrow: weather forecast looks good for the Lower Peninsula/Evans Glacier area.

start descent 1620z start ascent 2130z

Individual instrument reports:

ATM: performed flawlessly

MCoRDS: The University of Kansas MCoRDS system collected over 1.6 TB of data during the 5 hour survey. The bed echo was detectable over essentially all segments of land ice.

Snow and Ku-Band radar:

LVIS: was not in the plane

DMS: worked well; routine; 10,000 images recorded.

Gravity: worked normally.

POS/AV: operated normally.

DC8 on board data: worked well.

Following is a screen shot taken late in the day from one of the on-board nav displays.

